



## Clean the YAMAHA PSR-500 Keyboard

### Preface

Since I want to concentrate on releasing streams on Twitch in the future, I have made some thoughts about my image. Most people buy graphics, music, software and so on. Since I can't afford licenses from other artists at the moment, I have to do everything myself. So also everything that has to do with music. In Europe there is unfortunately a very bad [copyright system](#) and one can be warned because of different releases. For example, it is not allowed to publish music without the permission [of the music users](#). And this is supposed to get even worse. To be honest, I don't look through the internet and I prefer to do without licenses. Instead I borrowed the keyboard of my roommate and will record music, samples etc. with it. But before that I have to clean it properly. For this I orientated myself on some videos and articles, which gave me a [good basis, fix video](#) or [de:construction video](#).

### Materials

- A new Brush
- Flashlight
- Permanent Marker
- Masking tape
- Screwdriver
- Glass cleaner
- Cleaning wipe
- Cotton swabs

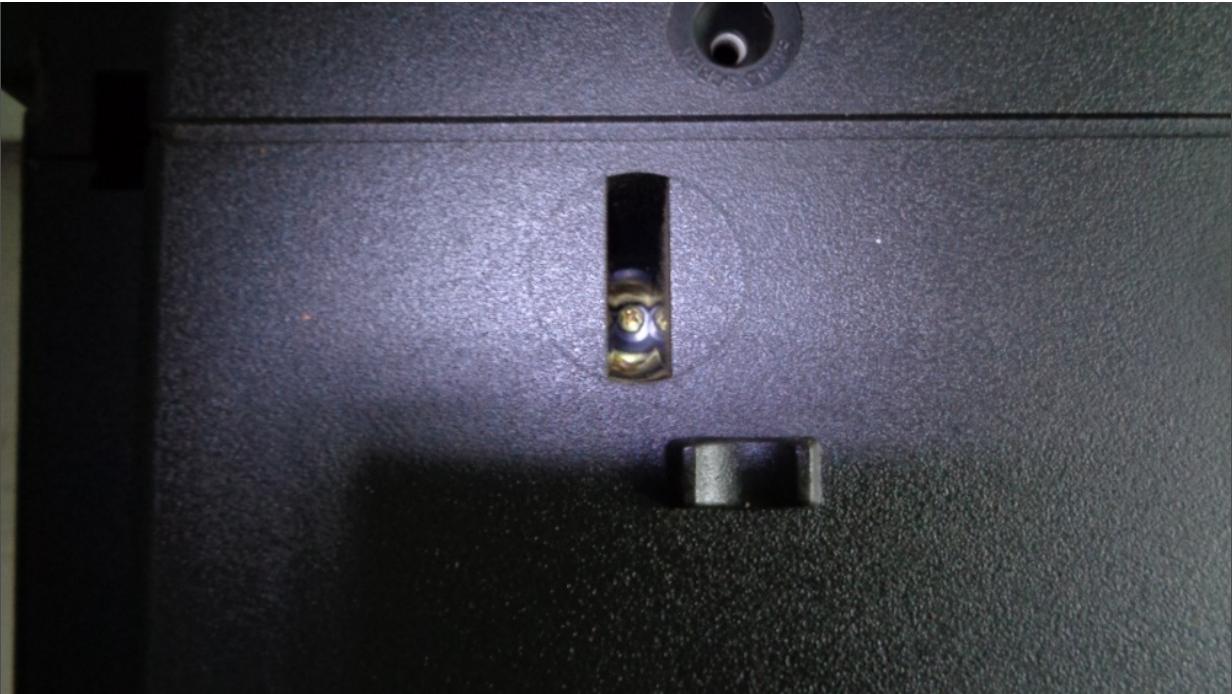
### Realisation



Before we can unscrew the keyboard, we have to label the keys with numbers. For this we use masking tape so that no glue remains on the keys. This costs a little more work, but it will help us to assemble it later.

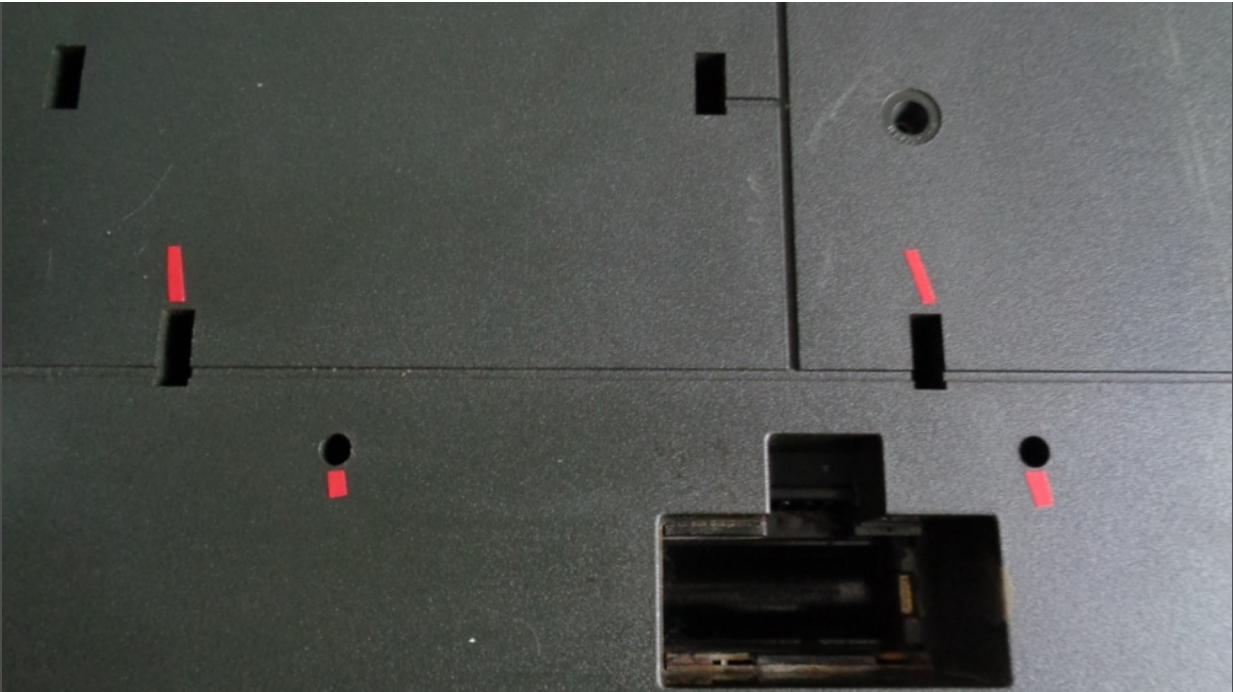


In the next step we turn the keyboard around and look at the bottom. There we see a lot of holes and in most of them there are screws.

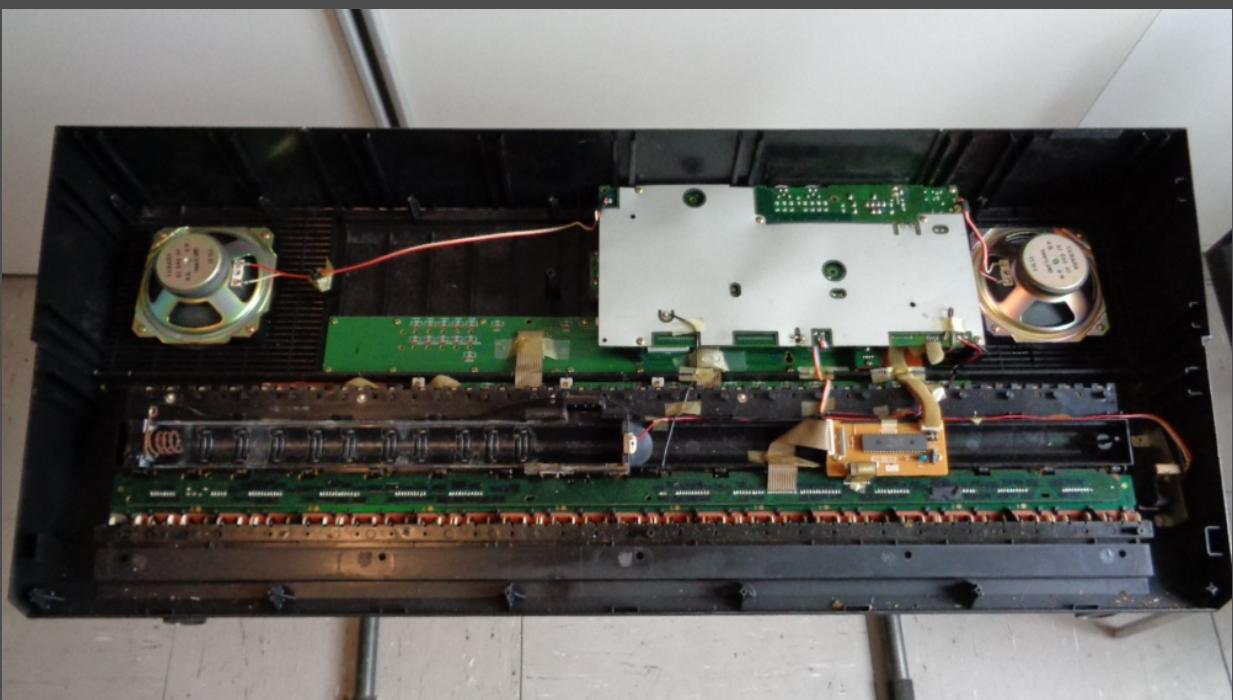


It is a good idea to get a flashlight, because you can see better how the screws are positioned in the holes. Especially with the angular holes this is helpful. Even in daylight you can't see much.

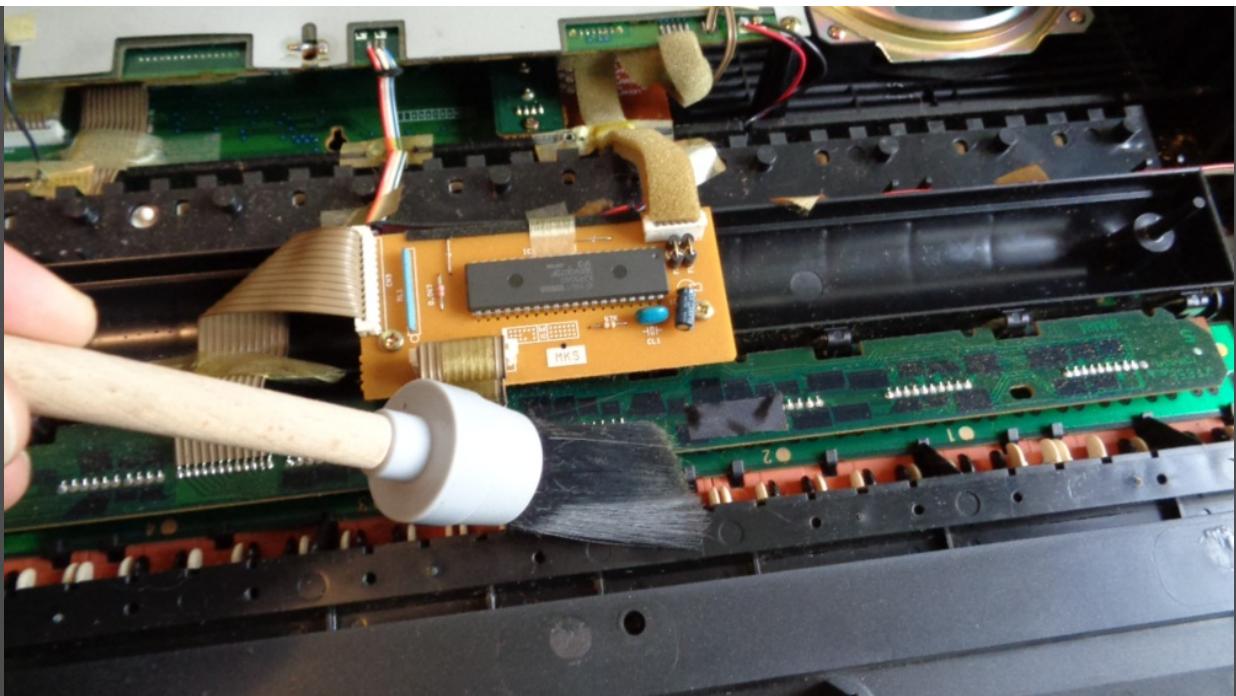




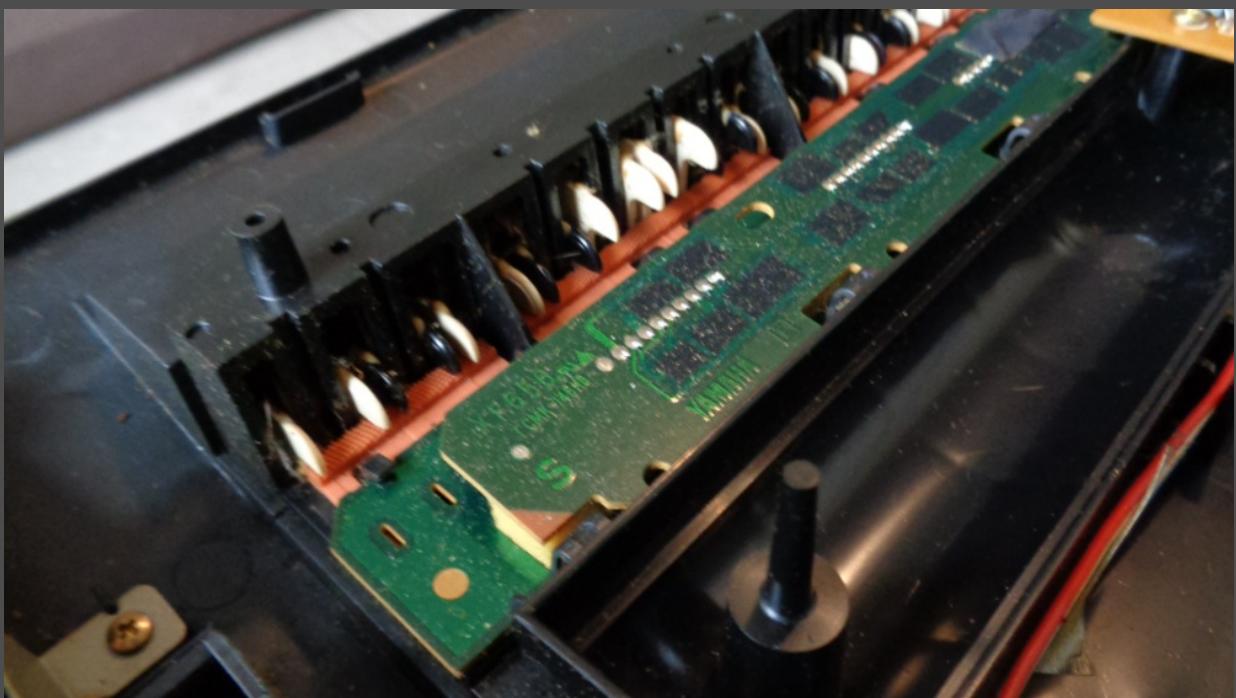
Since there are no screws in some holes I marked myself with red tape where I have to insert the screws again after the cleaning. I put the screws into a small cup, so that I do not lose any.



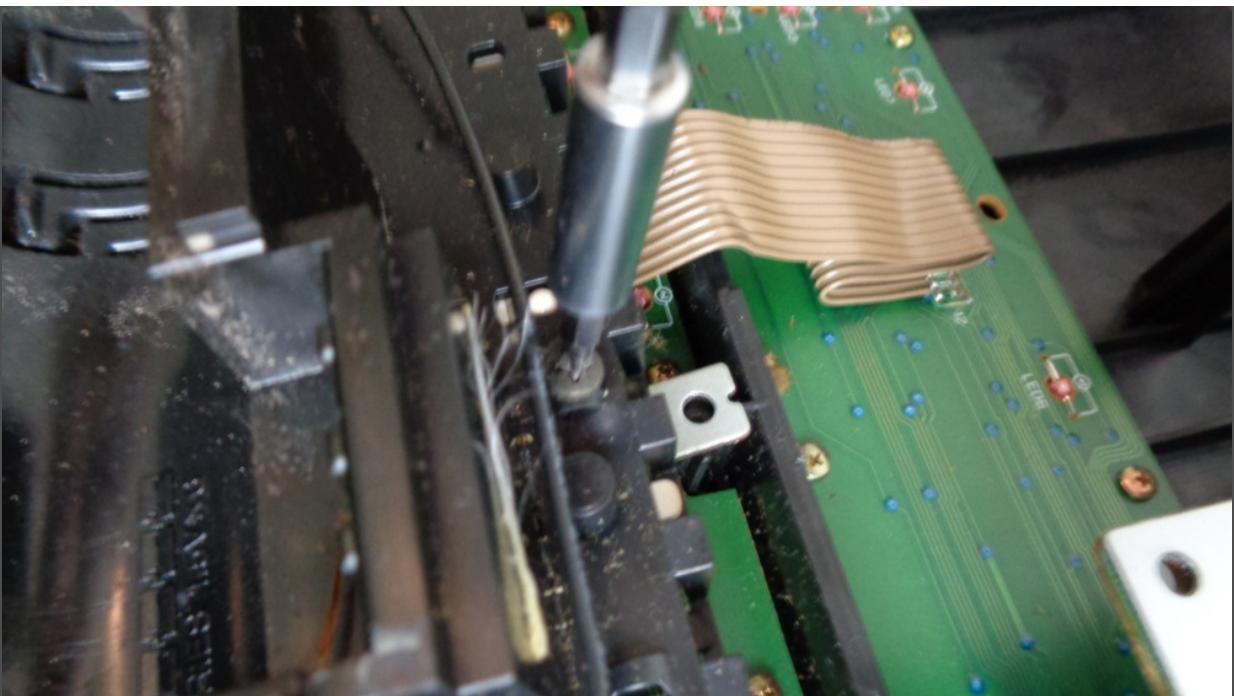
After that the keyboard will be released we take a closer look at the hardware. The loudspeakers are on the left and on the right. In the middle is the motherboard, which we are not interested in in this tutorial. Left in the middle is the battery compartment. Right next to it is a small ochre coloured board with a control controller that sends the signals of the buttons to the motherboard. Below we see the board for the keys and the rest. In this area we will work today.



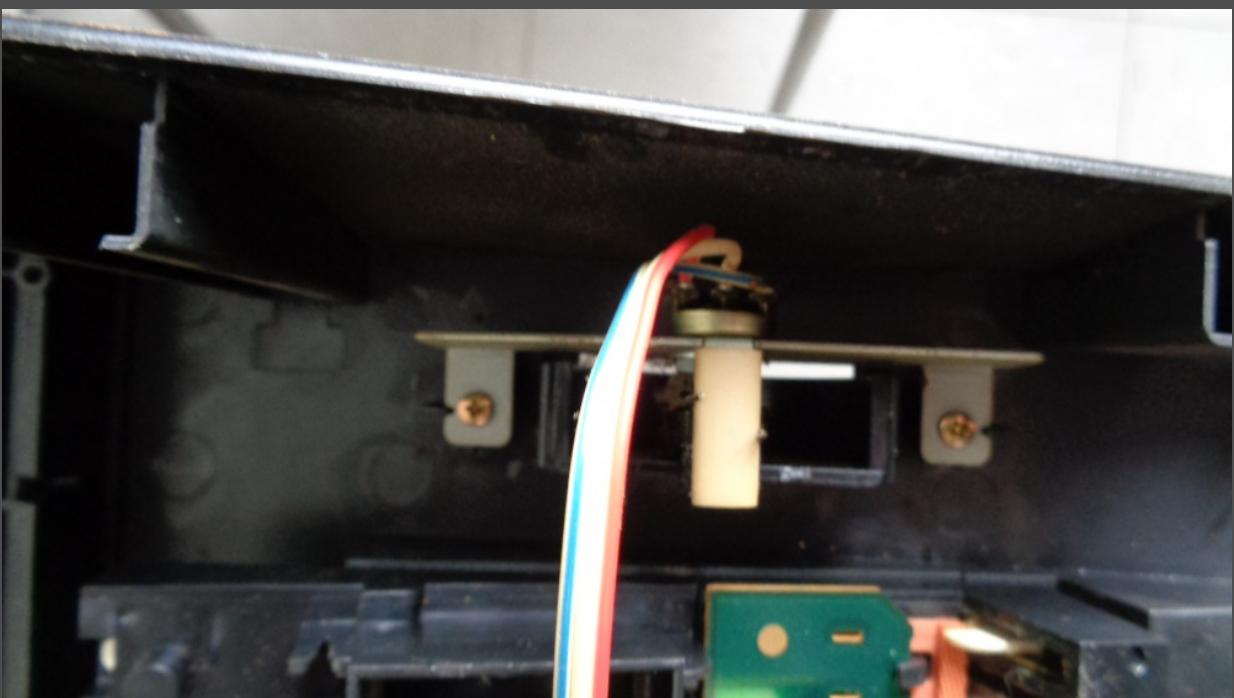
First we clean everything with a new brush. This doesn't have to be quite so rodent as it is only a pre-cleaning. It's about removing the biggest dust fluff.



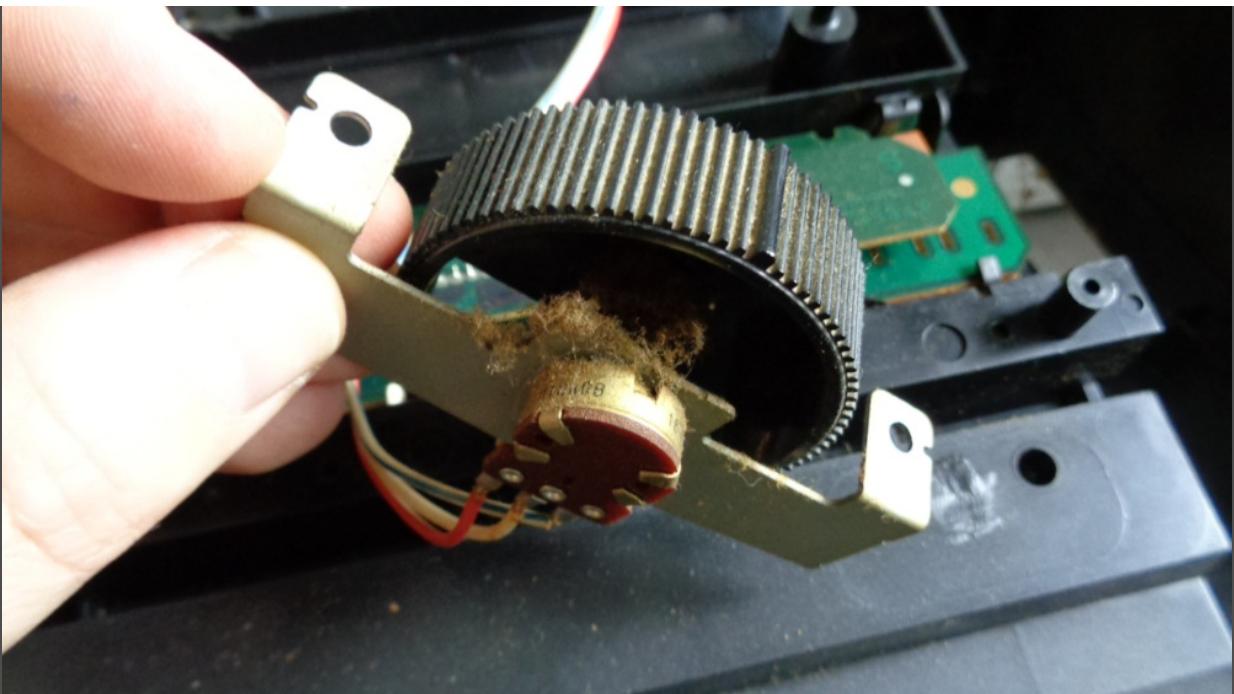
Here we see the circuit board for the keys once again in detail.



Altogether all parts of the keys are in a plastic compartment, which we have to unscrew. The two screws are located at the top of the box and are very easy to find.



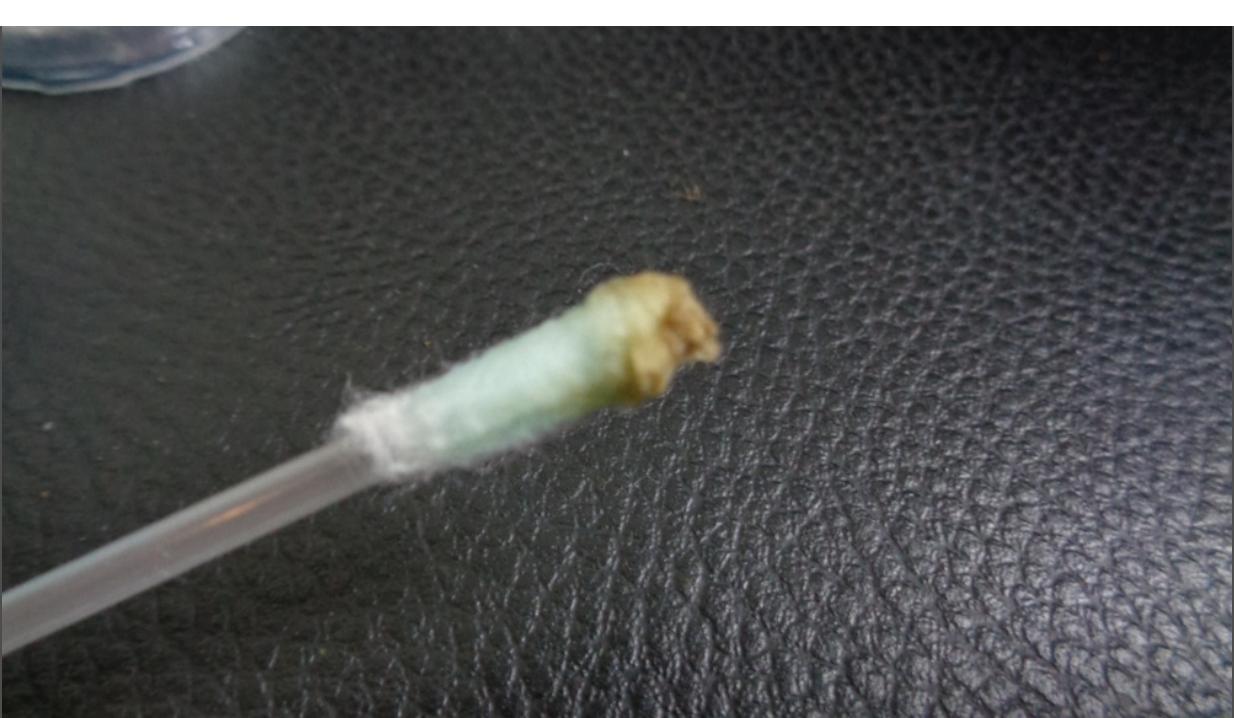
Here we see the knob for the pitch bend. We also have to unscrew it because the cable is too short. But that's no problem, because it can be screwed on again very quickly after work.



As we can see this one is very dirty, that you can hardly recognize the pointiometer anymore.

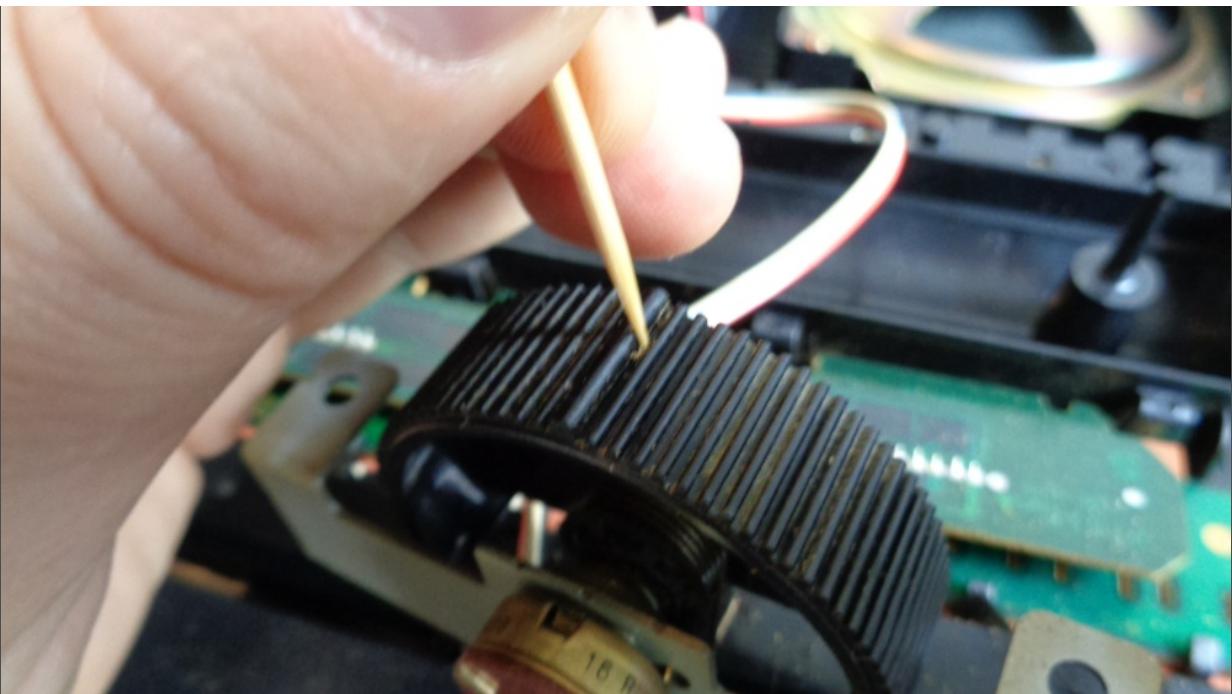


I use cotton pads and glass cleaner. I pack the glass cleaner into a small plastic bowl so that I can get better access to the liquid. Please do not use a glass cleaner that uses too much harsh chemicals, as this could damage the case.

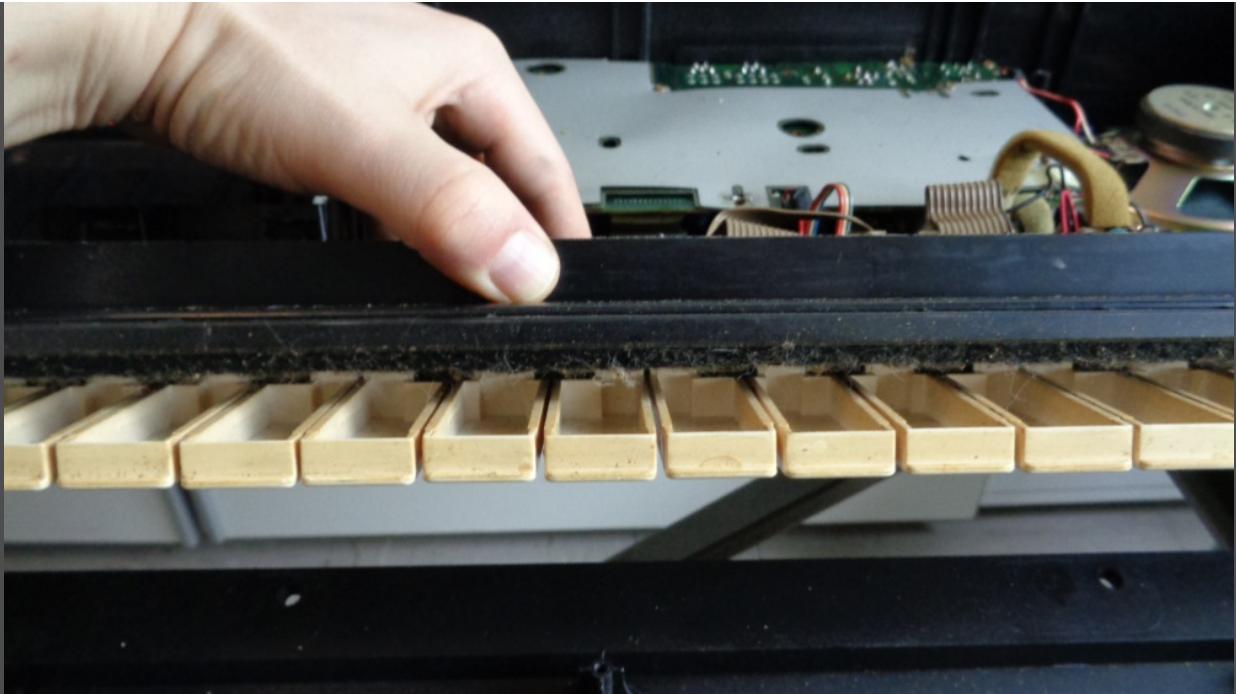


To get to very narrow places I use toothpicks to remove dirt or other particles. This works quite well because the wood usually does not damage the plastic. We still have to work carefully.

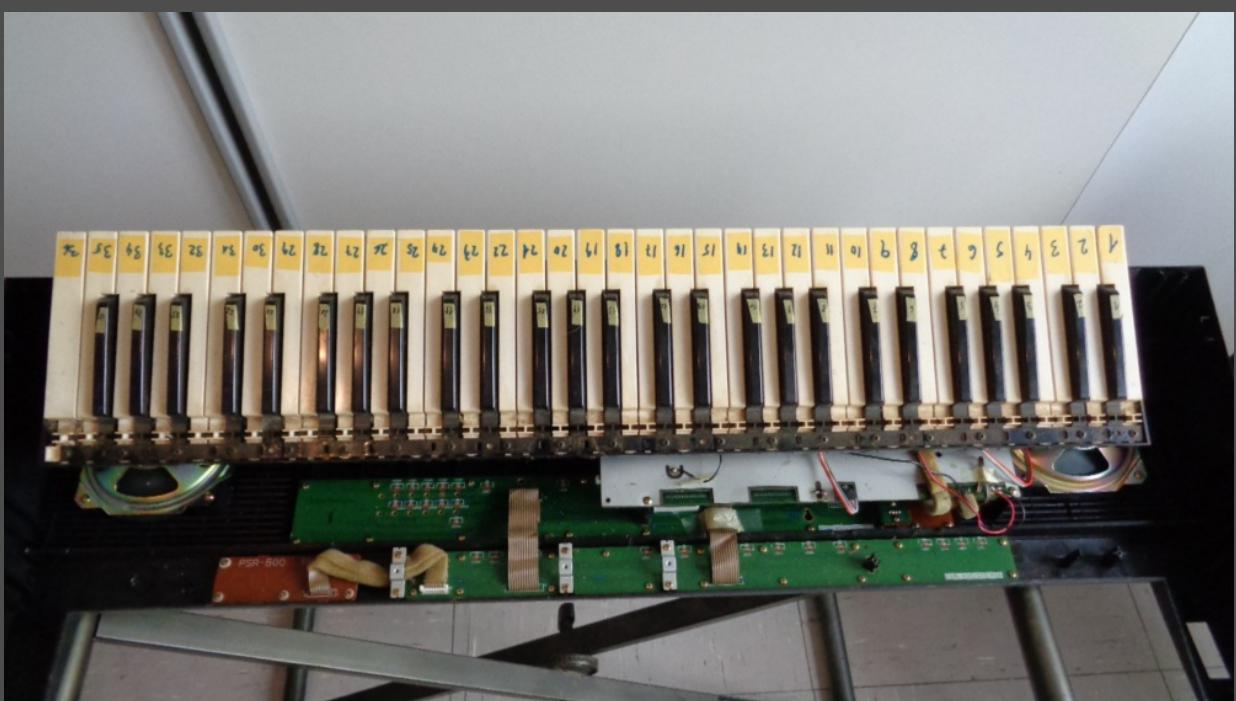




We carefully lift the keys out of the housing.



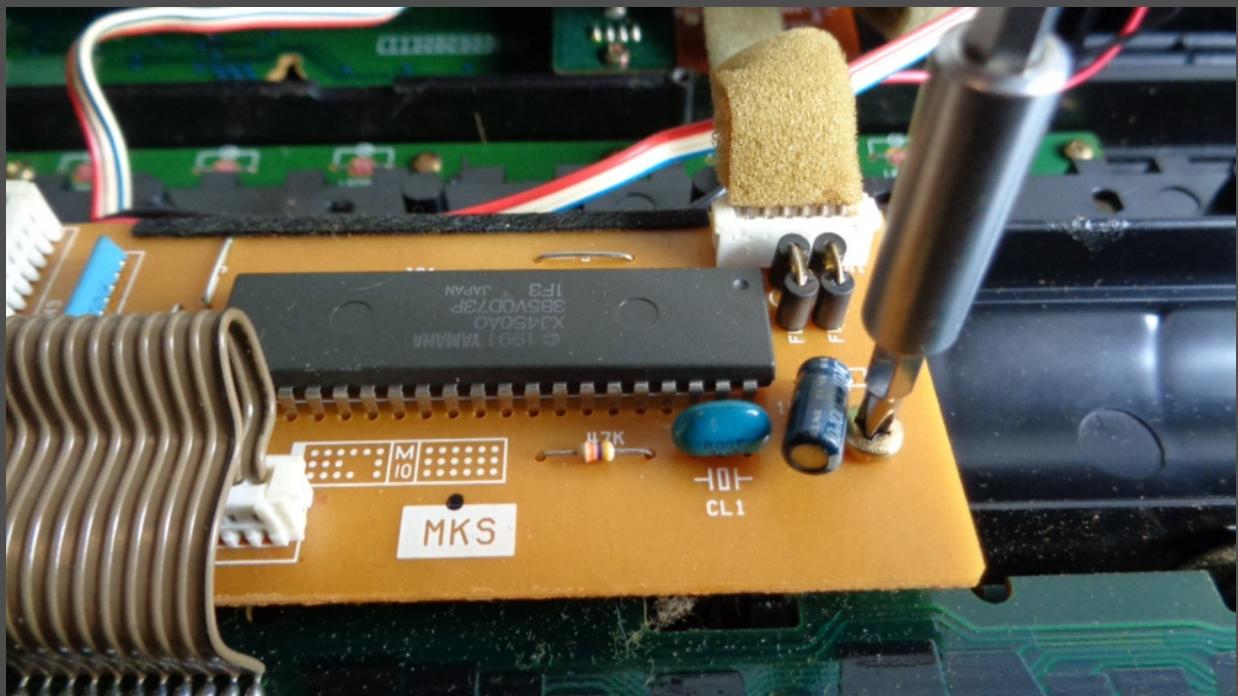
Since all components are connected by cables, we can only put the keys on the keyboard and have to work there.



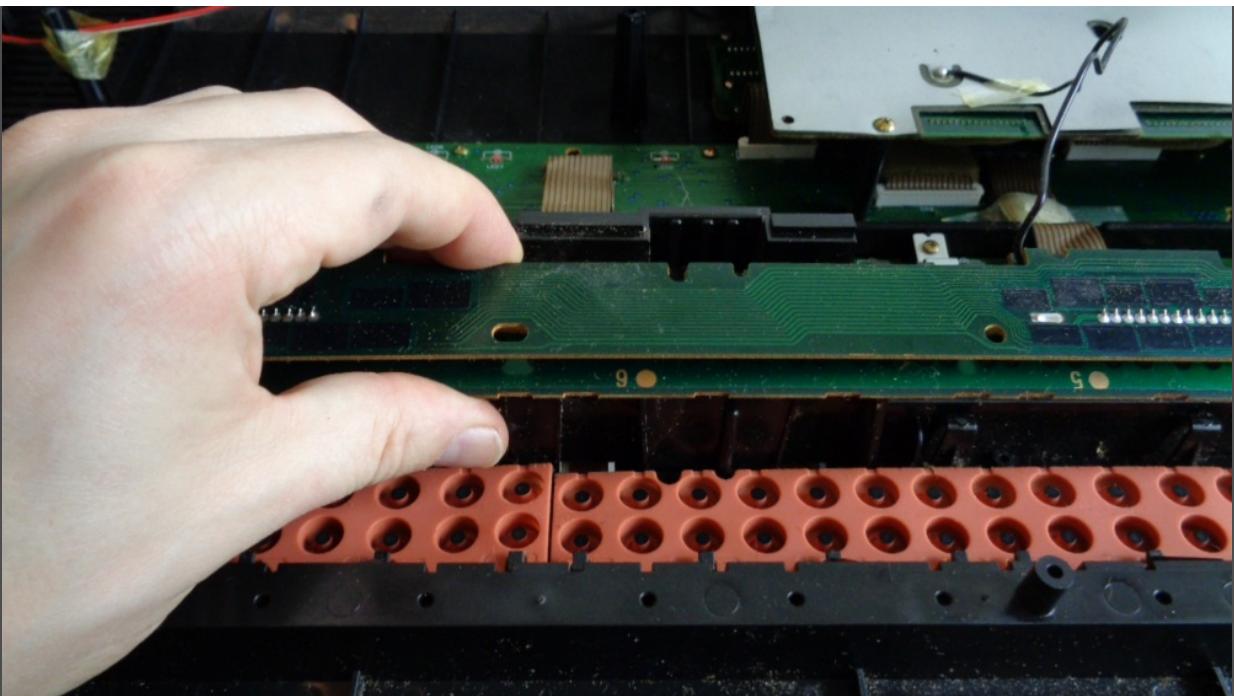
The bar with the screws is the main component that holds the keys in place. We will have to unscrew it later. Now we turn everything to the other side.



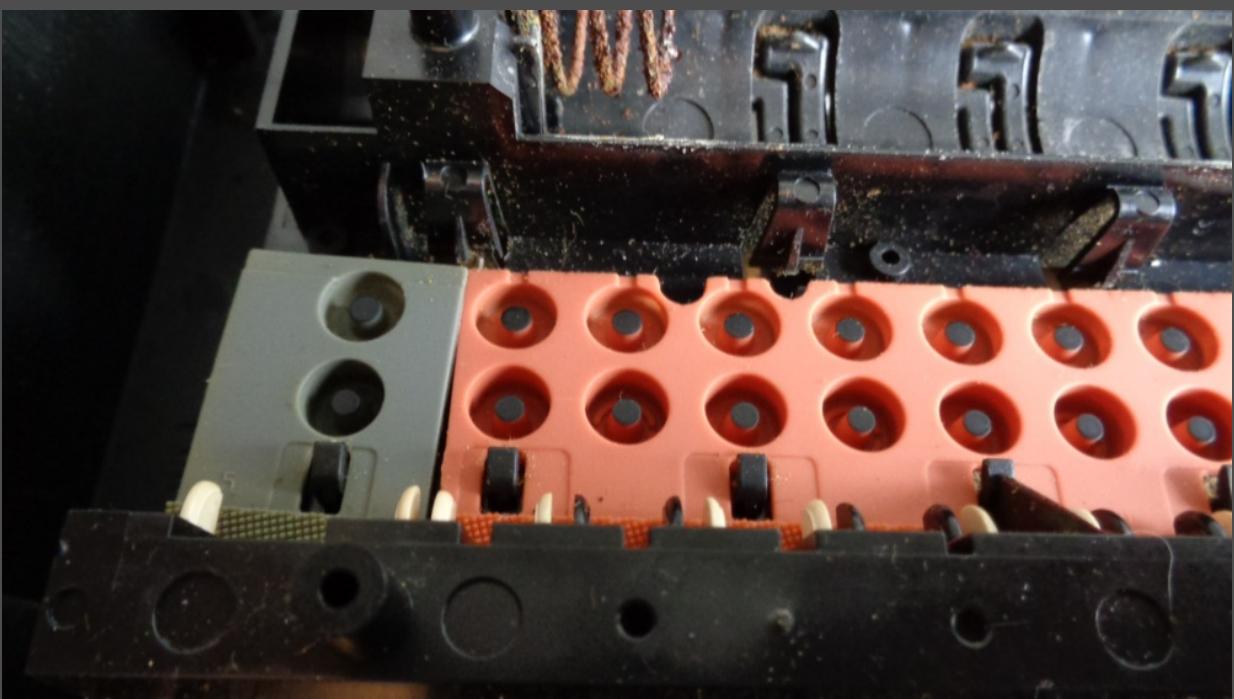
The small ochre-coloured control board must be unscrewed.



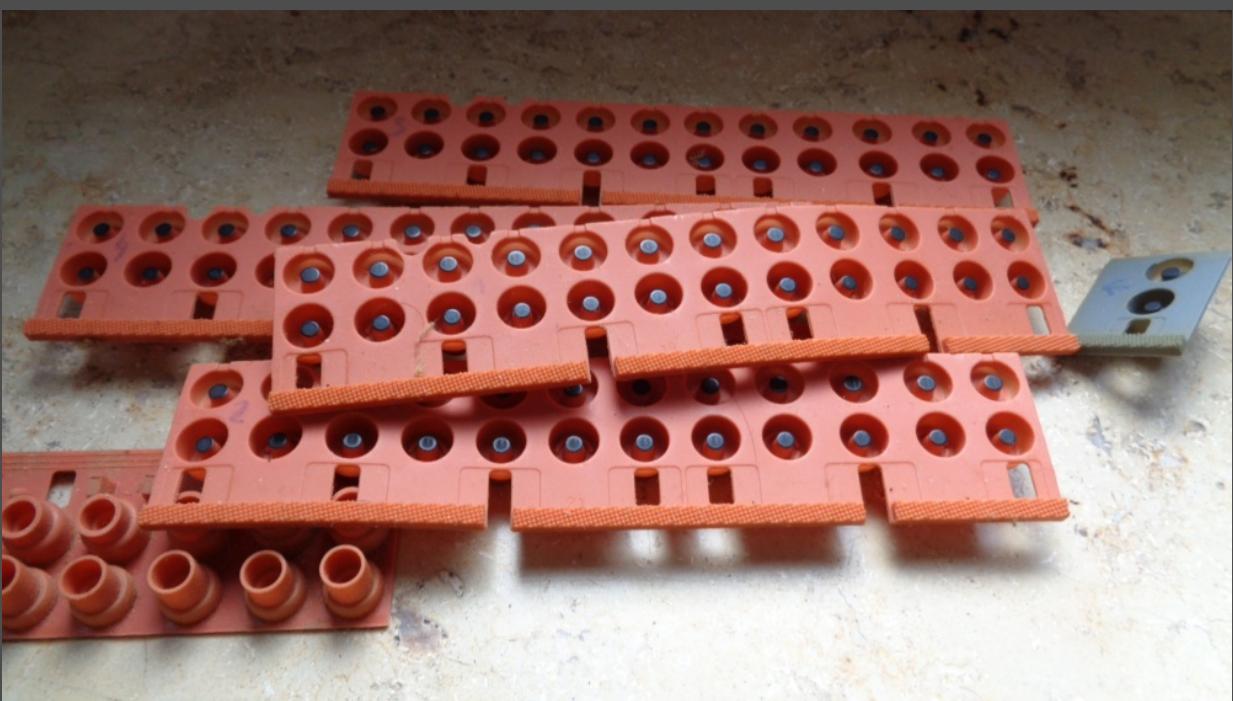
Then we take out the circuit board for the keys. This is very easy, because it is not screwed. All we have to do is turn some small plastic hooks to the side and we can simply lift off the PCB.



Below are the plastic knobs for the keys. Some of you may know this from old computer keyboards.



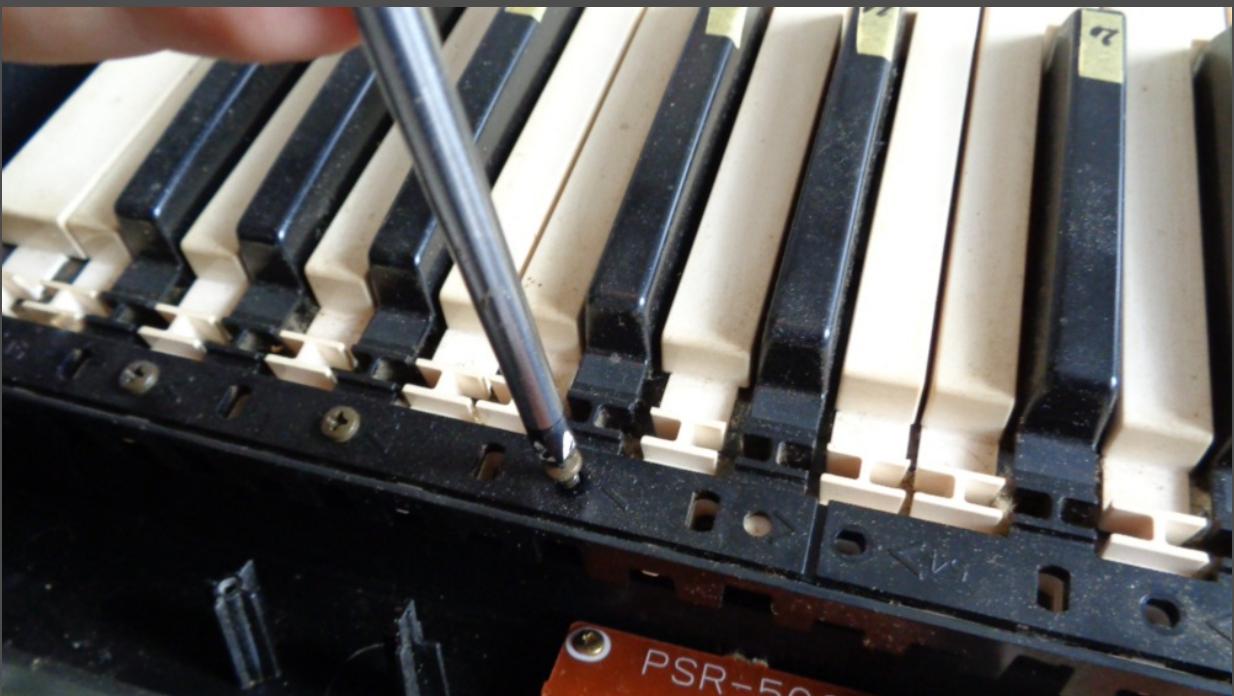
We label the plastic knobs with a waterproof pen so that we can put them back in the right order later and put them aside.



We clean the underside with a brush.



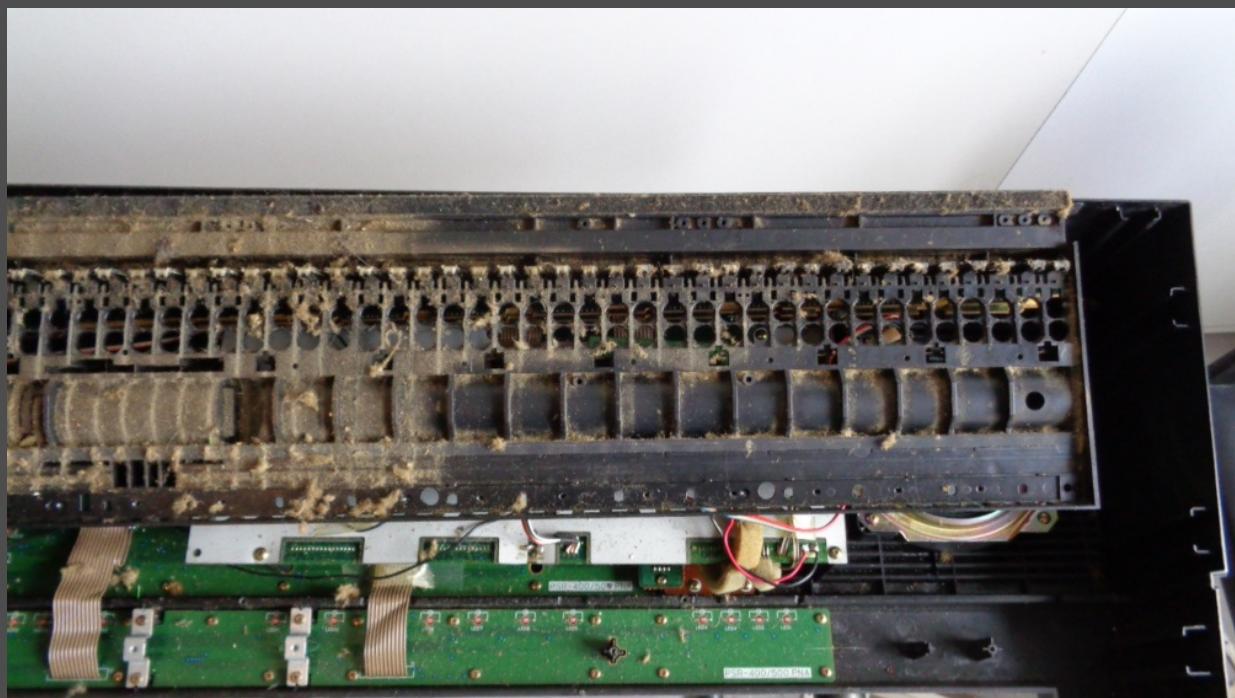
Now we can unscrew the bar, which holds the keys firmly.



The keys are always arranged in three handy blocks, which makes our work easier. We take them out one after the other and pay attention to the sequence. Sometimes it is a bit difficult to get the keys out and then it is advisable not to work too hectically or too fast, because otherwise you can break off important parts and we don't want that.



At this point I was really surprised how much dust and dirt is under the keys. I first used the brush, but couldn't get any further with it. With so much dirt it is better to use a vacuum cleaner.



I have arranged the keys in the correct order on my bed so that I don't get confused. So you should work in a room where you have space. A garage is the best place for that.

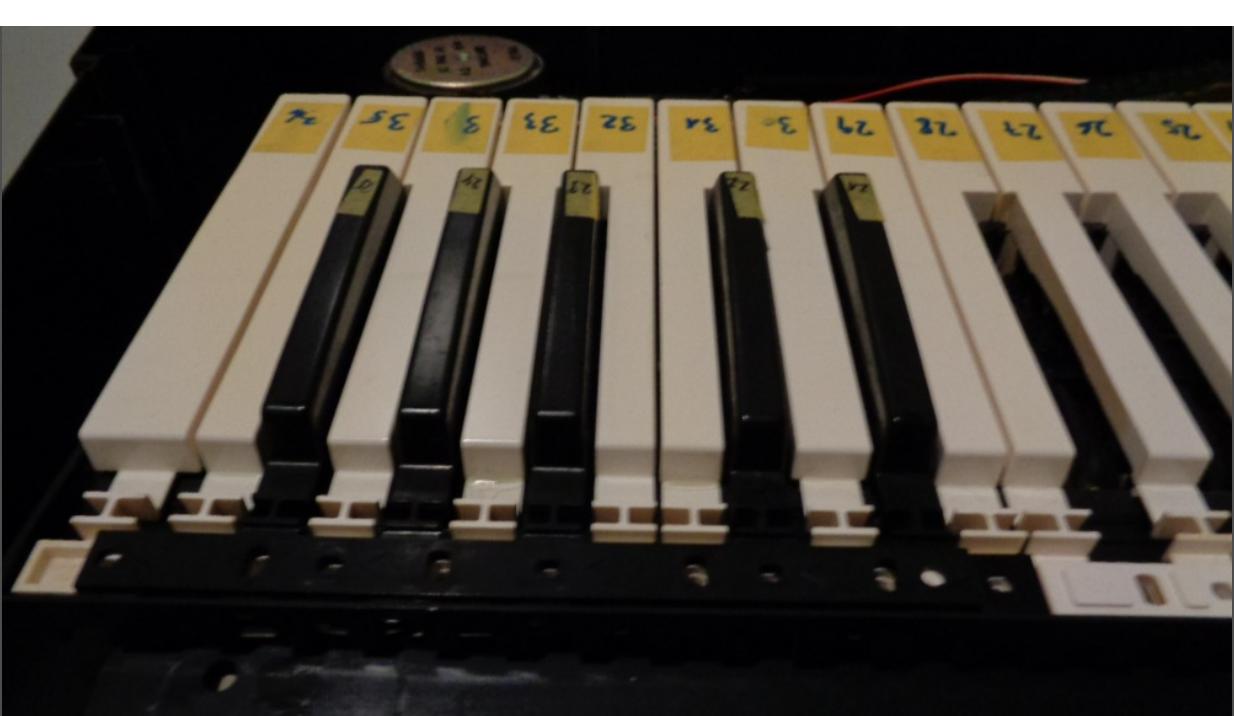


I clean the keys again with glass cleaner and cotton swabs, whereby I copied some techniques from real art restorers [\[7\]](#) .



When we're done, we'll put all the piano keys in their place.





The screws in the strip always go into the holes, where a small hint is attached. It is the small arrow pointing to the left.



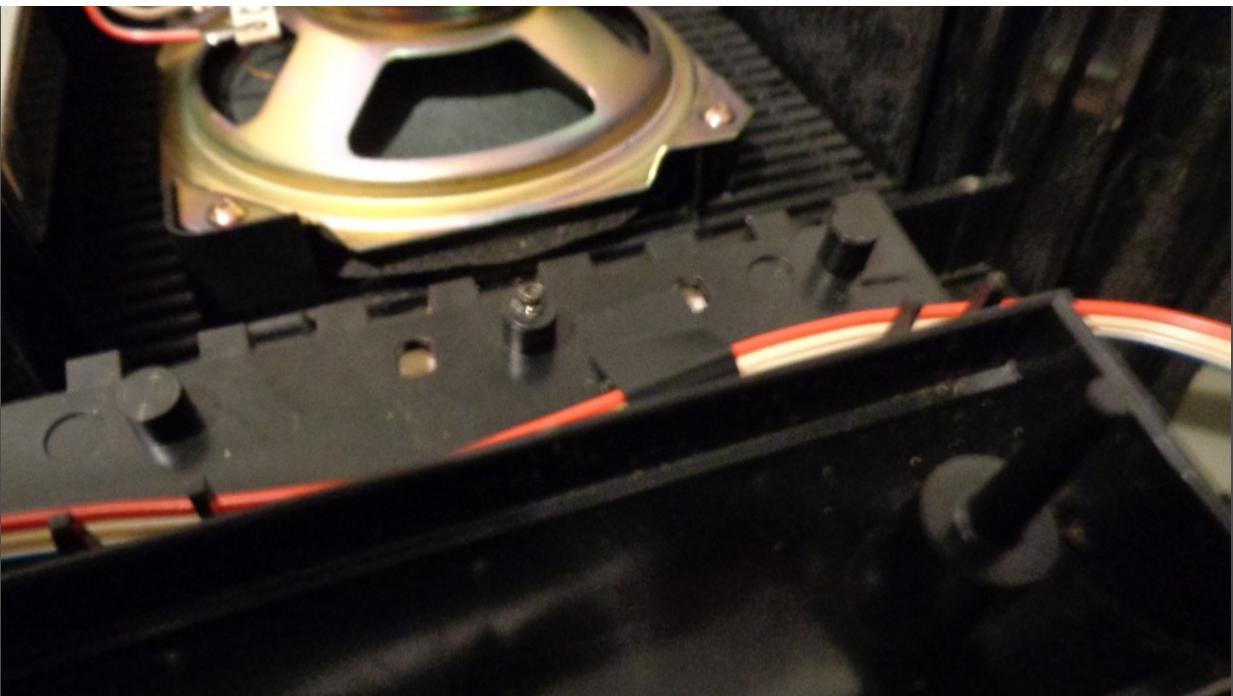
Once all the keys have been inserted, we detach the masking tape from the keys. We clean the areas under the tape with a cloth and glass cleaner.



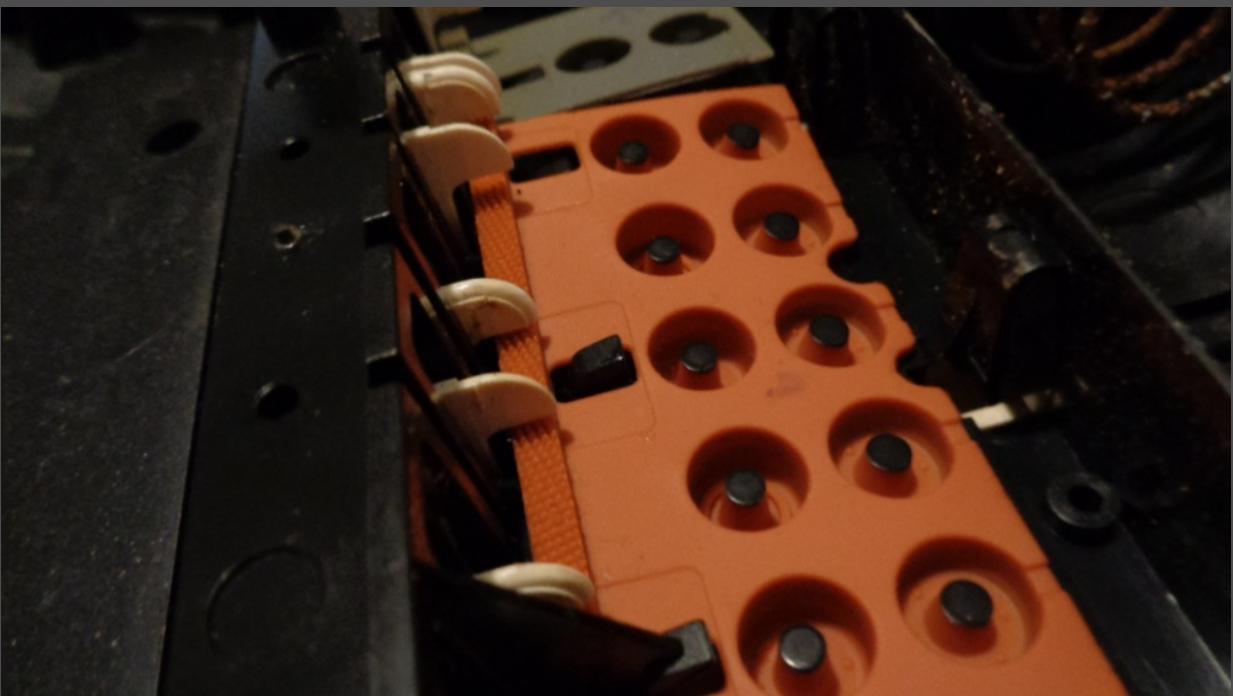
We grease springs and other moving parts a little with machine oil so that they run better.



We glue loose cables with small strips of adhesive tape to suitable places. So they are not loose in the house and cannot be torn off so fast or get entangled in other components.



In the last step we put the rubber naps and the circuit board back in the right place. Then we screw everything together again. This one only in reverse order.



### Conclusion

I would not have thought how complex such an electric piano can be. I also thought that there was much more technology in the cabinet because the keyboard was so heavy. In some places I had to think a lot about how to proceed, because you have to learn that first. But once you understand that, it's quite simple. After I had finished everything I had to take the keyboard apart because certain keys didn't work and two keys were screwed on too loosely. At this point I apologize for the poor quality of the photos, but I still haven't saved enough money to buy a better camera.